Hoplitis of ENA (east of 100<sup>th</sup> Meridian)
M. Arduser
Revised May 1, 2009

## Females:

1. Clypeus with a conspicuous erect tubercle apico-medially; clypeus much wider than long,
width x length about 3:1 or wider; scopa pale <b>robusta</b> (Nylander)
(circumboreal; Ontario, Quebec; not known from US)
Clypeus without an apico-medial tubercle or other projection; clypeus longer, WxL about 2:1; scopa variable, but usually pale2
2. Clypeus with apical margin crenulate to denticulate; mandible relatively long and narrow,
(length x maximum width at apex, about 2:1), three-toothed, apical tooth much larger than othersanthocopoides (Schenck)
(introduced from Old World; rare, NE US, <u>Echium</u> oligolege)
Clypeus with apical margin either entire, broadly concave or convex, or sometimes slightly undulate; mandible variable, <b>if</b> apical tooth much larger than others <b>then</b> scopa dark brown to blackish and mandible four-toothed
2 Scana dark brown, mandible much broader anically than bacally mandible with four teeth
<b>3</b> . Scopa dark brown; mandible much broader apically than basally; mandible with four teeth, apical tooth much larger than others; ST 6 with a stout, very short, apical mucro, sometimes concealed by pubescence
Scopa pale; mandible width apically and basally approximate; <b>if</b> mandible with four teeth <b>then</b> apical tooth not much larger than others; ST 6 apically simple, entire, without a mucro4
<b>4</b> . Mandible with four teeth, these approximately similar in size and equidistant from each other; T1 anterior surface dull, tessellate; T6 with a thin, fragile, transluscent lamella issuing from beneath the narrow, shelf-like apical margin of T6spoliata (Provancher) (widespread in ENA; western NA "Chlorosmia" spp. are the only other Hoplitis that have the thin lamella on the underside of the T6 shelf)
Mandible with three teeth; T1 anterior surface shiny, without tessellation; T6 lacking a thin fragile lamella on the underside of its narrow, shelf-like apical margin
5. Genal basket (this is the set of long, recurved hairs bordering the hypostomal area) well-
developed, nearly all hairs bordering hypostome very strongly curled; shelf-like apical margin of T6 quite short6
Genal basket poorly developed, relatively few hairs bordering hypostome strongly curled, many
straight hairs present; shelf-like apical margin of T6 longer, conspicuous, like the brim of a ball
cap8

- **7**. Females of the three species of *H.* (*Robertsonella*) are quite similar and difficult to separate reliably in the absence of associated males (which, conversely, are all quite distinct):
- **H. micheneri** Mitchell tends to be the largest of the three; punctures on T1-T2 are finer and more scattered than in the other two, and the surface of T1-T2 tends to be shinier in *H. micheneri*. This species is strongly associated with *Amorpha fruticosa*, the other two species have never been collected from that plant species.
- **H. simplex** Cresson and **H. nemophilae** Neff (manuscript name, in press) are virtually identical. Both are strongly associated with riparian areas and plants in the family Hydrophyllaceae.
- **8.** Shelf-like margin of T6 thinly but completely pubescent <u>ventrally</u>; shelf-like apical margin of T6 complete (extends around entire apical margin of T6); T6 punctures usually as coarse, or coarser, as those on T5; interspaces on T5 shining, without microsculpture; T5 with apical fasciae usually complete or nearly complete; labrum longer than broad....**pilosifrons** (Cresson) (widespread in ENA)

Shelf-like margin of T6 glabrous ventrally; shelf-like apical margin of T6 incomplete, narrowing and disappearing prior to reaching lateral corners of apical margin; T6 punctures usually finer and more dense than punctures on T5; interspaces on T5 tessellate; T5 lacking apical fasciae (occasionally present laterally); labrum broader than long......producta (Cresson) (widespread in ENA)